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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Christian Maletzko

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EXAMINER

ZEMEL, IRINA SOPHIA

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/519,801	Applicant(s) MALETZKO ET AL.	
	Examiner Irina S. Zemel	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-15 and 19 is/are pending in the application.
- 4a) Of the above claim(s) 6-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102/103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 5 and 19 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP 1-132642 to Sekisui Plastics Ltd., (hereinafter "Sekisui").

The rejection of claims stands as per reasons of record.

Claim Rejections - 35 USC § 103

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekisui in combination with WO00/68306 to BASF AG. US 5,521,627 is used as the English translation of the WO document (referred to as "Gluck").

The disclosure of Sekisui is discussed in the previous office action and incorporated herein by reference. The Sekisui reference while disclosing examples of beads obtained from blends of polypropylene (PP) with nylons, does not disclose any other polymers as suitable for blends with PP.

Gluck discloses that open cell expanded beads can be obtained via blending a small amount of incompatible polymer into a matrix of a thermoplastic polymer. While the teachings of Gluck use polystyrene (PS) as the matrix polymer, since polystyrenes behave similarly to polypropylenes in expansion process (an expanded beads are obtained via substantially similar processes from beads based on both PP and PS) it is reasonably believed that addition of any incompatible polymer to a matrix of either PP or PS will result in that

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incompatible polymer acting as any other incompatible thermoplastic polymer (i.e., as pore opener for the matrix polymer). Therefore, substituting PoM, which is highly incompatible with PP for nylon in comparative examples of Sekisui would have been obvious to obtain expanded beads that have open pores and also all the properties as disclosed in Sekisui (such as very stable foams that do not change the expansion ration with time0.

Response to Arguments

Applicant's arguments filed 6-2-2010 have been fully considered but they are not persuasive. The applicants state that " when an abstract is used to support a rejection, the evidence relied upon is the facts contained in the abstract, not additional facts that may be contained in the underlying full text of the citation. Thus, as set forth in MPEP 706.02(II), the Office must provide a translation of the underlying citation if the next Office Communication is to be a final Office Action." The applicants are incorrect in both the assertion that the examiner relied on the abstract only and in re-statement of the relevant portions of MPEP as requiring the examiner to provide a translation of any document relied upon. As clearly evidence from the rejection, the examiner, in making the rejection of claims, relied upon the entire disclosure of the reference, specifically the illustrative examples.

Insofar as the relevant portion of the MPEP 706.02(II), this portion specifically states that "If the document is in a language other than English and the examiner seeks to rely on that document, a translation must be obtained so

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that the record is clear as to the precise facts the examiner is relying upon in support of the rejection. The record must also be clear as to whether the examiner is relying upon the abstract or the full text document to support a rejection.” Emphasis added. As discussed above, the examiner made is clear what facts the examiner relied upon (with specific references to the illustrative examples), and insofar as the translation, such translation was obtained by the examiner via oral translation of the document by the Japanese language USPTO translators. As emphasized above, there is **NO** requirement that the examiner “must provide a translation“, rather it must be obtained, which, as explained above, it was. If the applicants dispute the facts relied upon by the examiner, they could obtain their own translation as well. However, for convenience, the examiner included the English language translation of the Japanese document with this Office action.

The applicants further argue that the polypropylene (PP) disclosed in the Sekisui reference is a modified PP. This is not so. The rejection discussed in detail in the previous office action clearly relied on the disclosure of Comparative example2, which discloses compositions comprising UN-modified PP and nylon in 80/20 ratio by weight. This composition is not expected to form a specific sea-island structure, and, in fact, polyamide is expected to act as a pore opener, at least because this composition is identical to the compositions disclosed in the instant specification, where PA acts as the cell opener. In addition, as evidence from the disclosure of Gluck, when a second polymer added to matrix of a first

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polymer, where the first and the second polymers are incompatible, the second polymer is expected to act as pore opener.

Therefore, contrary to the applicants assertion, the compositions disclosed in the Sekisui reference are identical to the compositions disclosed in the instant specification and are expected to have similar properties.

The applicants further argue that the Sekisui reference discloses a process for obtaining the foamed beads that is not the same as the process of the instant application. Specifically, the beads of the instant application are obtained by quick decompression of impregnated polymer beads, while the beads of Sekisui are obtained by pre-expanding by steam and then molded. While it is so, the pre-expanded particle of the reference are obtained in two step process (i.e., making the impregnated particles in the first step and pre-expanding with steam in the second), simply because unexpanded particles are easy to store and to transport. The physical process that takes place in both the process disclosed in the instant specification and the reference is the same, i.e., heating the particle above the softening point of the underlying polymer and above the boiling point of the blowing agent under pressure and quickly decompressing the beads to allow them to expand. The process of the instant invention does not cool the impregnated beads since it does not store or transport the beads.

Further, it is noted that the expanded beads of the instant invention are not usually not the final product as usually all of the pre- or expanded beads are and are processed via a secondary process (such as molding) to obtain the

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finally shaped product. See line 4 on page 2 of the instant specification stating exactly that – that the beads can be further processed..

In addition, as evidenced in Gluck, pre-expanded polymer beads based on compositions containing a polymer matrix and small amount of incompatible polymer dispersed in the matrix, which are obtained by the process that are substantially identical to the process disclosed in Sekisui exhibit open cell structure, i.e., the incompatible second polymer does act as cell opener in such process.

Therefore, in light of all of the evidence on the record, it is still reasonable believed that the beads obtained in the examples of Sekisui are of the claimed open cell structure, and the invention as claimed is unpatentable over the disclosures of the cited references.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

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the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Irina S. Zemel/
Primary Examiner, Art Unit 1796

Irina S. Zemel
Primary Examiner
Art Unit 1796

ISZ